

**Remarks**

**Preliminary Matters**

Claims 66-68, 70, 72-74, 76-78 and 80-83 are presented for reconsideration. Claims 66, 68, 76 and 78 have been amended. Claims 1-65, 69, 71, 75 and 79 have been canceled.

References to paragraph numbers in the Specification are taken from the Official Publication hereof, U.S. Patent Application Publication No. 2005/0138007.

**Objections to Specification**

The specification was objected to because the term "non-transitory computer-readable storage medium" in claims 76-83 is not defined in the specification. Applicant has amended the Specification to incorporate language similar to claim 46, which is original disclosure, in order to provide support for the language of amended claim 76. No new matter has been added.

**Rejections Under 35 U.S.C. § 101**

Claims 76-83 were rejected under 35 U.S.C. § 101. Applicant has amended independent claim 76 to recite the amended language of the Specification described above. Applicant believes that the amendment to the Specification and to claim 76 is sufficient to overcome this rejection.

**Rejections Under 35 U.S.C. § 103**

**First Rejection.**

Claims 66-70, 72-73, and 76-82 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cole et al., U.S. Patent No. 6,571,239 (Cole) in view of Mazner et al., U.S. Patent

Application Publication No. 20040078356 (Mazner) and further in view of Wakefield et al., U.S. Patent No. 7,171,349 (Wakefield).

Of the rejected claims, claims 66 and 76 are independent, and are directed to the same subject matter as method and computer software product claims. Applicant has amended claims 66 and 76, adding new limitations to more particularly define the invention. Claim 66 is discussed for convenience. Claim 76 is believed to be allowable under the same rationale.

As previously noted, Cole provides a method to modify associations between objects in a database and keywords of queries in an index. Cole does not disclose adding queries to the identified documents themselves as metadata. The Examiner has now cited Mazner for adding queries (search terms) to identified documents themselves as metadata (added information).

Mazner discloses a user interface system that allows a user to tag or categorize documents with selections from a predefined list of text strings ("vocabularies"). Mazner's system is designed for user selection among known categories and is guided by presentation of preselected terms (Fig. 4; Mazner states at paragraph [0035]):

"By selecting the area drop down box 142, the user is presented with a list of word phrases that describe aspects of the document. The user may select various ones of the areas by checking the associated checkboxes 142a."

Indeed, Mazner requires that the search query be guided, i.e., formulated from a list of terms, and in this respect, Mazner teaches away from the invention. Mazner provides for addition of new terms to the list of text strings (paragraph [0038]). Nevertheless, the result is a larger list of predefined terms, and Mazner's technique becomes increasingly cumbersome for the user as

the list grows in size. Mazner recognizes this drawback and resorts to devices such as dropdown boxes (paragraph [00045]) in order to prevent user frustration.

Amended claim 66 now requires that the queries be unguided. This limitation is supported in the Specification at paragraph [0007] which states:

".... finding things on "The Web" can be easy, but only if the user knows the right terms to use to do the search. The right terms are those used by the designers of the web pages. This makes finding non-specific items difficult". It is necessary, when formulating a query to make an intelligent guess as to the search terms that might elicit a positive response from the search engine. [emphasis supplied].

Claim 66 now recites an additional limitation: "automatically accepting unguided user queries". Mazner's technique of adding new terms is not automatic, but operator-assisted. As shown in Fig. 4A, when it is desired to include a new term (a term unavailable in the system's vocabulary) in a query, some extra interaction with the user interface by the user appears to be required before the query can be accepted and executed (checkbox 142A; Fig. 4A). The claimed invention permits a practically unlimited choice of terms for a user query, which requires no approval before the search engine is presented with the query.

The combination of Cole and Mazner does not teach or suggest the addition of such ad hoc queries to documents. In contrast, users of Mazner's system limited to preselected vocabularies, the tradeoff being that a user is assured that his selection will result in a successful search, resulting in categorization of a

document among known possibilities according to the disclosed principal application of Mazner's system.

Wakefield was cited as teaching ranking identified documents. Amended claim 66 recites steps of adding queries to selected identified documents, and of ranking identified documents in subsequent searches executed by new users, weighted according to the frequencies of occurrence of the added queries. In this way, the search engine adapts to user query practices and becomes increasingly adept at accommodating unguided queries in order to locate desired documents. The ranking procedures disclosed in Wakefield does not add to the combination of Cole and Mazner in teaching or suggesting the claimed combination that includes the adaptive reinforcement described above.

**Second Rejection.**

Claims 74 and 83 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cole, Mazner, Wakefield and further in view of Mittal et al., U.S. Patent Application Publication No. 20040261021 (Mittal). Mittal was cited for multi-lingual support for queries. Mittal, combined with Cole, Mazner, and Wakefield does not teach or suggest the combination of the base claims. Claims 74 and 83 are believed to be allowable as pending from an allowable base claim.

**Support for Amendments**

In the independent claims 66 and 76, the element "automatically accepting unguided user queries" is supported at paragraphs [0007] and [0035] together with paragraphs [0019], [0025] and [0032] of the Official Publication, for example.

The elements "selecting at least one of the identified documents" and "adding the queries to the selected documents themselves as metadata" are supported at paragraph [0027].

The element "ranking the identified documents according to respective frequencies of occurrence of terms of the added queries therein in subsequent invocations of the search engine" is supported at paragraph [0035].

**Concluding Matters**

Dependent claims 68 and 78 have been amended to conform antecedents. Dependent claims not specifically mentioned are believed to be allowable as pending from an allowable base claim. Dependent claims

It is believed that the amendments and remarks presented hereinabove are fully responsive to all the grounds of rejection and objections raised by the Examiner, and that the Application is now in order for allowance.

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Respectfully submitted,

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